

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

**AGENDA ITEM REQUEST**

for Proposed State Implementation Plan Revision

**AGENDA REQUESTED:** December 13, 2006

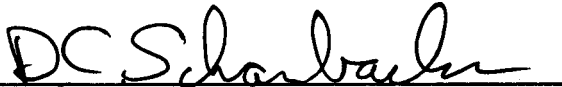
**DATE OF REQUEST:** November 21, 2006

**NAME & NUMBER OF PERSON TO CONTACT REGARDING CHANGES TO THIS REQUEST, IF NEEDED:** Kerry Howard, 239-0556

**CAPTION:** Docket No. 2006-1874-SIP. Consideration for publication of, and hearing on, proposed revision to the Houston-Galveston-Brazoria State Implementation Plan.

The proposed SIP revision documents the progress made to attain the one-hour ozone standard, documents steps toward attainment of the eight-hour ozone standard, and estimates 2018 as a reasonable target year for attainment of the eight-hour ozone standard in the Houston-Galveston-Brazoria nonattainment area.

The proposed revision also describes the two concurrently proposed state-level rules in Chapter 114 and Chapter 115. In addition, the Houston-Galveston Area Council has committed to implementing 2.82 tpd of local-level NO<sub>x</sub> controls by 2009. This revision also includes 2000 base case modeling, 2009 future case modeling, VOC and NO<sub>x</sub> reasonably available control technology analyses, reasonably available control measures analysis, contingency measures, and the 2002 Houston-Galveston-Brazoria periodic emissions inventory. (Emily Barrett, Janis Hudson) (Rule Project No. 2006-027-SIP-NR)



Deputy Director



Agenda Coordinator



Division Director

for  
Susanne M. Hildebrand

Copy to CCC Secretary? NO

# **Texas Commission on Environmental Quality**

INTEROFFICE MEMORANDUM

Commissioners

**Date:** November 21, 2006

**Thru:** LaDonna Castenuela, Chief Clerk  
Glenn Shankle, Executive Director

David Schanbacher, P.E., Chief Engineer **DCS**

**Docket No.** 2006-1874-SIP

**Subject:** Commission Approval for Proposal of the Houston-Galveston-Brazoria Eight-Hour Ozone State Implementation Plan (SIP) Revision  
Project No. 2006-027-SIP-NR

## **Reasons for the SIP Revision:**

The eight-county Houston-Galveston-Brazoria (HGB) metropolitan area is classified a "moderate" ozone nonattainment area by the U.S. Environmental Protection Agency (EPA) under the eight-hour ozone standard. The Federal Clean Air Act (FCAA), 42 USC, §7410, requires states to submit State Implementation Plan (SIP) revisions for the eight-hour ozone SIP standard by June 15, 2007.

## **What the SIP Revision will do:**

This SIP revision documents the substantial progress made under the one-hour ozone national ambient air quality standard (NAAQS) despite rapid economic and population growth in the area. This SIP also documents steps toward attainment of the eight-hour ozone standard. The challenges to attain the eight-hour ozone standard are great because the area is one of the most comprehensively controlled industrial complexes in the world; the area has unique and complex ozone formation chemistry and meteorology; the magnitude of reductions needed are significant; the TCEQ lacks regulatory authority to set emission standards for on-road and non-road mobile sources, and no additional pollution control technologies are anticipated to be developed before controls would need to be in place (January 1, 2009).

The HGB SIP includes all feasible control measures that can be implemented by 2009. This SIP revision includes two proposed state-level control measures: 1) adds marine diesel fuels to the definition of diesel fuel that is subject to the Texas Low Emission Diesel Rule and 2) addresses under-estimated, unreported, or under-reported volatile organic compounds (VOC) emissions from tank landings, flash emissions, and degassing of storage tanks, transport vessels, and marine vessels with liquid heels. In addition, the Houston-Galveston Area Council has committed to implementing Voluntary Mobile Source Emission Reduction Programs by 2009.

This revision includes the 2000 base case and 2009 future case modeling, which shows that nine monitors will be at or above 85 ppb in 2009 with the current controls in place. Results of modeling sensitivity runs indicate that combined nitrogen oxides (NO<sub>x</sub>) and VOC reductions of 53 percent from all sources or NO<sub>x</sub>-only reductions of 58 percent from all sources may be needed to achieve the standard. The SIP also includes a preliminary analysis using a limited data set for the year 2018, with all current one-hour ozone controls, the proposed eight-hour controls described in the preceding paragraph, and estimated reductions from federal-level on-road and non-road mobile source strategies that will be phased in between 2009 and 2018. The 2018 analysis predicts four monitors will have ozone concentrations at 85 ppb or greater.

Re: State Implementation Plan draft concept memo  
Houston-Galveston-Brazoria Eight-Hour Ozone SIP Revision  
2006-027-SIP-NR

Details regarding the next steps, the results of the TexAQs II field study, and the development of a new modeling episode are described in this revision.

The TCEQ believes that, with the ongoing efforts described in Chapter 5, the development of a new modeling episode, the continued implementation of increasingly lower engine emission levels for on-road and non-road mobile sources, and further research and consideration of additional control strategies, 2018 is a reasonable target year for attainment of the eight-hour ozone standard in the HGB area.

This revision also includes the federally required analysis of reasonably available control technology (RACT) and reasonably available control measures (RACM), contingency measures, and the baseline emissions inventory.

**Statutory authority:**

The authority to propose and adopt this SIP Revision is derived from the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.002, which provides that the policy and purpose of the TCAA is to safeguard the state's air resources from pollution; TCAA, §382.011, which authorizes the commission to control the quality of the state's air; and §382.012, which authorizes the commission to prepare and develop a general, comprehensive plan for the control of the state's air, and Texas Water Code §5.102, General Powers, and §5.013, General Jurisdiction of Commission.

The Federal Clean Air Act (FCAA), 42 USC, §7410, *et seq.*, requires states to submit SIP revisions that specify the manner in which the NAAQS will be achieved and maintained within each air quality control region of the state. EPA's Final Rule to Implement the 8-Hour Ozone National Ambient Air Quality Standard (commonly referred to as the Phase II Rule), published on November 29, 2005, outlines the requirements for state plans.

**Effect on the:**

- **Regulated Community:**  
Manufacturers and distributors of marine diesel in the HGB nonattainment area must comply with the proposed new TxLED marine diesel rule. The proposed VOC rule will affect owners and operators of storage tanks, transport vessels, and marine vessels located in the HGB nonattainment area. The proposed new storage tank requirements will affect owners or operators storing volatile organic liquids in tanks located at petroleum refineries, chemical plants, gasoline storage terminals, bulk terminals, and oil and natural gas production sites. The limitations on landing floating roofs will have the largest impact on for-hire bulk storage terminals. The proposed changes to the degassing rules will affect owners or operators of storage tanks, transport vessels, and marine vessels and owners or operators of facilities that clean transport and marine vessels. Tanks with capacities between 40,000 and one million gallons will be most affected since these tanks are currently exempt from the degassing control requirements.
- **Public:**  
The public in the HGB area and surrounding areas will benefit from improved air quality.
- **Agency programs:**

Re: State Implementation Plan draft concept memo  
Houston-Galveston-Brazoria Eight-Hour Ozone SIP Revision  
2006-027-SIP-NR

Field Operations Division (FOD) conducts field investigations to verify compliance with rules in SIP revisions. FOD will need to investigate for compliance with the revised requirements when conducting routine site visits. Enforcement of rules in the SIP will not significantly increase the number of facilities investigated by the state and local governments. These rules may increase the Office of Compliance and Enforcement workload when investigating affected facilities.

**Controversial Issues:**

Stakeholders may comment that the plan is insufficient because it does not demonstrate attainment. Local entities may comment that EPA should not approve the SIP revision, which may result in conformity implications. The preliminary analysis showing that federal-level controls alone may not be enough for the HGB area to attain the eight hour ozone standard by 2018 may be of interest to many stakeholders.

**Legislative interest:**

Legislative interest will likely be high because this SIP revision will coincide with the 2007 legislative session.

**Stakeholder involvement:**

Public meetings with interested parties, including local governments, industry, environmental groups, and members of the public were held in Spring 2006. They included three meetings on March 22, 2006, and May 27, 2006, that focused on mobile source (on-road and non-road) control strategy development; March 28, 2006, regarding ports, locomotives, and marine sources; and April 19, 2006, and May 24, 2006, for point and area source control strategy development.

**Proposed schedule:**

Anticipated proposal date: December 13, 2006

Public hearing dates: In Houston on January 29, 2007; in Austin, February 8, 2007; in Longview, February 6, 2007; in DFW, February 1, 2007

Public comment period: December 29, 2006, to February 12, 2007

Anticipated adoption date: May 2007

SIP Revision due to EPA: June 15, 2007

Controls must be in place: January 1, 2009

Attainment date: End of ozone season 2009

**Agency contacts:**

Emily Barrett, HGB SIP Coordinator, 239-3546

Janis Hudson, Staff Attorney, 239-0466

Lisa Martin, Texas Register Coordinator, 239-1966

**Attachments (SIP narrative)**

cc: Chief Clerk, 5 copies  
Matt Beeter, Office of General Counsel  
Sonia Ralls  
Kerri Rowland

Re: State Implementation Plan draft concept memo  
Houston-Galveston-Brazoria Eight-Hour Ozone SIP Revision  
2006-027-SIP-NR

Rebecca Rentz  
Greg Merrell  
Jason Skaggs  
Ashley K. Wadick  
David C. Schanbacher, P.E.  
Emily Barrett  
Lisa Martin

Electronic cc: Janis Hudson, Staff Attorney  
Terry Salem, Staff Attorney  
Laura Pfefferle, Staff Attorney  
Kerry Howard  
Kathy Singleton  
Booker Harrison, OLS Liaison  
Russ Kimble, OLS  
Dan Eden, Deputy Director, OPRR  
John Steib, Deputy Director, OCE  
Matthew R. Baker, P.E., Division Director, SBEA  
Pattie Burnett  
Betsy Chapman  
Susana Hildebrand, P.E., Division Director, AQD  
Theresa Pella  
Kelly Keel  
Diane Mazuca